

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, } PHILADELPHIA, SEPTEMBER 13, 1862. { New Series,
No. 308. } Vol. VIII. No. 24.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

BY LOUIS BAUER, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.,

[For the Medical and Surgical Reporter.]

Lateral Curvature of the Spine; Scoliosis.

Gentlemen:—Few subjects of pathology have received more attention on the part of the profession, and in none have the combined efforts of scientific investigation been more barren of practical results than in scoliosis. For centuries it has been known as a formidable and unmanageable infirmity, and as such it is still recognized by competent practitioners. Not only that the proximate cause of this deformity is shrouded in obscurity, but even its remote cause is still the subject of dispute. To recite all the plausible and partly ingenious hypotheses which in the course of time have been advanced, might be interesting, but of no practical benefit to you. Most of them did not outlive anatomical and physiological tests. If at all, they belong to history, and we feel little inducement to stir the dust.

However, it should be borne in mind, that the investigation of the subject is embarrassed by almost insurmountable obstacles. Incipient cases of scoliosis, which alone would disclose the pathological condition of the textures concerned, can scarcely be had for anatomical examination; and advanced forms exhibit merely the results, but not the direct causes. We are, therefore, limited to clinical facts, and much is left to speculation.

The old theory, imputing in a rather undefined way, to the osseous structure of the spine, the exclusive cause of the deformity, has never acquired great sway, and was speedily superseded by the theory of Delpech.

Lorinser* has recently attempted to rejuvenate

the same theory in a series of contributions, valuable in many respects. The cases selected for his pathological investigation, exhibited softening, general infiltration and osteoporosis of the vertebral bodies, and he concluded that both scoliosis and kyphosis are akin in their proximate cause, and that the rapidity of their respective development governed the shape of spinal deviation. The morbid and structural changes, described by that author, we cannot fail to recognize as the characteristic, rachitic infiltration with which either form of spinal curvature is undoubtedly compatible. But the error becomes self-evident when Lorinser strives to present that pathology for general acceptance in all cases of scoliosis, it being at variance with well-established clinical experience.

The doctrine of Delpech, of disturbed muscular antagonism is still in vogue, and most orthopædic surgeons base their treatment of scoliosis on that cause. The meritorious and systematic labors of the late Dr. Werner† have, however, so thoroughly disproved Delpech's theory as inconsistent with physiology, that no well informed practitioner can any longer uphold it. With the firm guide of Dr. Werner's observations and experiments, we now perceive the fallacy and inconsistency into which Delpech has led us, yet we are still inclined to retain a plausible theory in preference to none at all.

We presume that you are not familiar with the writings of Werner, and hence we may consider ourselves justified in briefly adverting to his deductions. The antagonism of the muscular system has been based on the supposition, that each muscle or each group of muscles was equally balanced by another muscle or another group, and that the form of the frame depended on the equal power of both. Delpech consistently inferred from this supposition, that the form was necessarily disturbed as soon as this muscular antagonism was infringed by a one-sided increase or decrease of muscular power. Whereas Wer-

* Bemerkungen über die Pathologie und Therapie der Rückgraths-Verkrümmungen. Wiener Med. Wochenschrift, No. 22, 23, 24.

ner demonstrates that the *muscular antagonism is a gross error and in reality does not exist*. In this assertion his experiments and physiological facts bear him out. His "Theses" tend to prove:

1st. That there is no antagonism between muscles in the construction of Delpech;

2d. That single muscles and the groups are unequally balanced as Borelli has already stated;

3d. That the balance of power is simply subservient to the will;

4th. That the full measure of muscular power will produce results proportionate to the length, thickness, and leverage under which single muscles or groups act irrespective of antagonism;

5th. That the muscle, if not actuated by the will, is physiologically at rest;

6th. That this rest is complete and not impeded by the so-called muscular tonicity;

7th. That the muscular structure is endowed with contractile but not with expansive powers.

8th. Hence, a contracted muscle cannot expand itself, but requires either the weight of the extremity or an antagonist to regain its full length to be ready for another contraction;

9th. The theory that a muscle becomes permanently contracted, and the extremity deformed when its antagonist is paralyzed, is *erroneous*;

10th. During a temporary contraction, the skeleton is drawn in the direction of the healthy muscle;— but as soon as the contraction is terminated, it will return to its original position by its weight, or may be reformed by assistance. Thus the forearm will extend itself, though the triceps be paralyzed. When the weight does not aid, as, for instance, in paralysis of the extensors of the fingers, it requires the other hand. In paralysis of the facial nerve, laughing or speaking, draws the face toward the healthy side. In this distorted attitude the face remains, because the contracted muscles, though at rest, cannot expand themselves. But the face can be pulled straight, and will remain so until again disturbed by a new exertion of the facial muscles.

11th. Permanent muscular contraction necessarily emanates from a morbid process, and cannot be regarded as a physiological act.

12th. A muscle can be at rest, whether extended to its full length or shortened.

13th. Contraction is inseparable from shortening, but the latter may exist without the former.

14th. Most muscles combine with their antagonist to effect a motion in a third direction.

Thus the flexors and extensors of the foot affect both adduction and abduction.

These numerous facts, supported by conclusive experiments and observations, render Delpech's "muscular antagonism" untenable.

Its fallacy becomes, however, still more transparent as soon as its practical application is attempted upon habitual scoliosis, for it is utterly impossible, even among the warmest adherents of Delpech's theory, to settle the problem, whether the dorsal muscles are on one side weaker or stronger than their antagonists. Nor are they able to decide, whether the muscular preponderance exists on the convex or concave side of the deviated spine. At any rate, the dynamometer has not disclosed the fact that there is any preponderance of muscular power on either side.

On a similar base rest the views of Jules Guérin and those of Strohmeyer. When the former promulgated his theory of "Muscular Retraction," as the invariable cause of scoliosis, and the tenotomy as its sovereign remedy; when he soon after adduced quite a number of cases successfully relieved by dividing the retracted muscles, the surgical world was electrified, and the suggestions readily embraced. The more sober surgeons of the time, Dieffenbach among them, at once remonstrated against the wholesale and indiscriminate use of the knife, declaring that only well defined muscular contractions should be subject to operation. The clinical test thus invoked and carefully instituted, led to perplexing results. For the muscles on either side of the curvature, in both the thoracic and lumbar deviation, would show themselves in one position retracted and in another relaxed, and the difficulties arose in determining which of them were to be divided. In the ensuing discussion on this point, some of Guérin's followers held that those muscles were contracted that were on the concave side, and *vice versa*. The consequence of this uncertainty was, that both groups were subject to the knife, and what was more astonishing still, both parties asserted the same good result. At this stage of the discussion, Malgaigne in his excellent *Mémoire** to the Académie des Sciences, protested against the abuse of tenotomy and myotomy. With reference to the division of the dorsal muscles, he pronounced the operations of Guérin in the Hôpital des Enfants Malades, a total failure, rather aggravating than improving the cases. In order to decide between the con-

*Paris, 1844.

flicting reports on the merits of the proposed new treatment of scoliosis, the Academy appointed a committee of inquiry with Roux as its chairman. Guérin could not be persuaded to submit more than one case to the inspection of the committee; but the latter succeeded in collecting twenty-four of his cases. Most of them were not only aggravated by the operation, but some completely disqualified to labor. Thus terminated the delusion of Guérin's muscular retraction, and ever since, his former adherents have become silent on the subject.

Strohmeyer's theory of one-sided paralysis of the respiratory muscles has never been seriously entertained and acted on.

There is yet another hypothesis which ascribes to the disturbance of the equilibrium of the body the cause of scoliosis. There are indeed some facts which seem to sustain that view. The loss of an extremity by amputation; unequal weight on one side of the body; a shorter limb or a malposition of one of the lower extremities, affecting the position of the pelvis, and so forth, unquestionably give rise to a single or double lateral curvature of the spine. You notice this deviation readily when the patient stands or walks.

On assuming a sitting or recumbent posture, at the same time relaxing the contracted muscles, you will notice that the deformity has vanished, and that the spine of the patient is as straight and as perpendicular as that of any other person, but from the constant exercise, much more flexible. We have seen many instances of the usual distortions incident to hip disease, some of them of thirty years standing, and yet there was no permanent scoliosis. From these facts it would appear that a disturbance of the centre of gravity *per se* is not sufficient to cause permanent deviation of the spine.

Thus far the attempt to establish a simple and generally acceptable cause for ALL FORMS of scoliosis, has proven a signal failure. Deficient as our knowledge is with reference to the pathology of lateral curvature, we know this much, that there are different forms of this infirmity, arising from different morbid causes. Thus we know, that rachitis and endostitis may give rise to scoliosis conjointly with kyphosis; that emphysema most commonly leaves a moderate lateral deviation of the spine, with flattening of the thorax; and again, that wry-neck is never without more or less curvature of the cervical portion

of the spine. But all these and other forms are not the subject of our discourse. On this occasion, we mean to concentrate our attention on that species known by the term of "*scoliosis habitualis*," that being the most frequent and disastrous in its results. As the pathology of this deformity is not as yet clearly established, we must content ourselves chiefly with clinical facts, and thus indirectly obtain as clear an insight into its nature as circumstances will permit.

First and foremost, it should be stated, that the beginning of Habitual scoliosis is entirely painless; that its development but rarely causes any serious constitutional disturbance; and that a moderate state of health is by no means incompatible with this infirmity. This fact is of significance, because it proves satisfactorily to our mind, that there is no inflammatory or structural disease at the base of the difficulty. For this reason we had to take exception to Lorinser's views, although authenticated by pathological investigation upon the subject. Though we do not dispute the latter, yet we feel justified in opposing the general inferences drawn from them, being in direct opposition to clinical facts.

Suffice it to say, that we never have observed, in connection with scoliosis, any one of those symptoms denoting a lesion of the spine or any irritation of the spinal cord and its membranes, except a moderate attenuation of the body, and this only in the higher grades of the deformity.

Nor has any other orthopædic surgeon, to our knowledge, placed on record any observation to the contrary;

2d. Scoliosis has not been traced to traumatic causes, which are apt to produce structural affections of the spine and its adjacent tissues;

3d. Scoliosis does not occur at a period of life at which the spine is easily deranged, either by traumatic or constitutional causes;

4th. Scoliosis occurs much more frequently among girls than among boys, being another evidence against a traumatic cause;

5th. Scoliosis is much oftener the concomitant of wealth than of poverty;

6th. Scoliosis is much more observed among the female population of large cities than in rural districts;

7th. Scoliosis originates most usually at the time of puberty, and in young ladies whose sexual development is protracted, whose menstruation is either imperfect or has not as yet made

its appearance; whose condition is feeble from rapid growth and confinement, and whose spine is endowed with an unusual degree of flexibility. From this condition we have, however, seen a few exceptions in girls of most unexceptionable constitutional health, strength, and maturity; in whom, however, the deformity never acquired any great extent;

8th. The boys, whom we have seen afflicted with scoliosis, were almost invariably of delicate and florid appearance; tall and thin, with a highly flexible spine;

9th. Scoliosis is remarkably rare among so-called scrofulous individuals; and on the tolerably extensive field of our personal observation, we have scarcely noticed one instance in which the patient manifested symptoms of constitutional affliction.

10th. Although many of our patients affected with scoliosis were, in a moderate degree, asthmatic, yet, we recollect *but one case*, a southern lady of some thirty years of age, that suffered simultaneously from pulmonary phthisis.

11th. Scoliosis prevails in the northern latitudes of the temperate zone, and diminishes toward the tropics.

In summing up these facts, and in excluding from our consideration traumatic and dyscrasie causes, and likewise structural changes in the spine, we are reduced to a few points, which prove that scoliosis bears a close connection to a certain age, to the female sex, its evolution, and a certain general condition of the system and the spine. In these conditions collectively, lays, perhaps, the general pathology of scoliosis, and no author has in our estimation more appreciated them than our late friend Dr. Buehring of Berlin, whose contributions* on the subject are entitled to respect. According to this author, a low state of haematoses at that period constitutes the general predisposition to scoliosis, that is to say, a hydramic or anæmic state of the blood with an inefficient nutrition of the various structures of the body, depriving bones and cartilages of their usual firmness and elasticity, and rendering them susceptible to an alteration of their respective forms. This state of the bones and cartilages, he attributes simply to the poverty of the nutritive fluid, analogous to the blood of the lower animals whose skeleton does not acquire the firmness observed in the higher animals. The softness of the bone is, therefore, the simple result

of a low state of nutrition, and not of any specific structural disease, as for instance, rhachitis, osteomataxis, osteitis, etc. Nor is the softness so great as to be affected by the weight of the body alone, but sufficient to give the spine an unusual degree of flexibility. The next and local predisposition to scoliosis is, according to Buehring, the natural deviation of the spine toward the right side of the thorax, which exists to a slight degree in every individual, being the result of a symmetrical weight of the spine by vital organs. This view is sustained by accurate measurements of Buehring and others, and are borne out by the fact that in almost all cases of scoliosis the spine deviates in that direction.

To these constitutional and local predispositions, external causes must be added to establish lateral curvature. Buehring charges the use of improper dresses, more especially the wearing of corsets with prejudicial effect. Besides, hard benches, without backs, in school, and the habit of standing on one limb is looked upon as the cause of throwing the spine out of the perpendicular. When this, often merely a bad habit, grows upon the patient without his knowledge, it gives rise to one-sided compression of the vertebral bodies and cartilages by the superincumbent weight, and thus lays the foundation of scoliosis. Thus far the views of Buehring are acceptable and conform with clinical observation. Most authors confirm, that prejudicial habits in gait and position have much to do with the establishment of scoliosis, and this is the reason why this form has been termed *scoliosis habitualis*. But it should be distinctly understood, that the habit alone is not a sufficient cause; the peculiar condition of the system to which we have adverted, is conditional to permanent deformity.

Some writers have ascribed great importance to the principal use of the right arm and right side, but this seems to be an exaggerated notion, since, with few exceptions, everybody prefers the use of the right arm to that of the left, without becoming deformed thereby. Whether the action of the heart in a diagonal direction accounts for the normal deviation in the thoracic portion of the spine toward the right, is open to doubt, since the most powerful cardiac action in hypertrophy and disease of the heart do not materially increase it. A few cases have been recorded in which the heart occupied the opposite position, and the left hand was preferred for use; they are,

* Die seitliche Rassigrade—Ver. Krausmung. Berlin, 1851.

however, so exceptional in their nature that no safe inference can be drawn from them. On the other hand, deviations to the left of the spine have been observed, in which the patients were right-handed, showing conclusively that the pre-
ference of one or the other hand is of little influence upon scoliosis.

No doubt, yet other causes are operative not sufficiently known or appreciated. Improper diet and sedentary life, violent dancing and late hours must necessarily tend to enfeeble the constitution and increase the morbid predisposition. In two cases in our charge we ferreted out masturbation as a source of weakness of the system. But the calendar of causes is certainly not exhausted by those we have mentioned, and much will be left to the sagacity and penetration of the attending surgeon.

We have thus delineated to you the condition and causes which in all probability underlie incipient scoliosis. Its progress is hastened by their persistency, and by the deformity itself. You will easily comprehend that after the spine has once lost its perpendicular and its individual vertebral bodies press with superincumbent weight obliquely upon the intervertebral disks and eventually upon each other, the deformity must proportionately advance.

To be continued.

COMMUNICATIONS.

TOXICOLOGY.

BY GERARD ARINK, M. D.
Of Rochester, N. Y.
Hydrargyrum.

Continued from page 430.

Quicksilver in nature, is found in rocks, in an impure state, from its admixture with other substances, from which it is separated by washing or distillation. Or it is obtained from natural sulphur-mercury (cinnabar) with the aid of iron or lime, by distillation.

If mixed, and rubbed together for a considerable time with any powdered material, conserve, or fatty substance, it becomes changed into a black powder, or mass; but upon the separation of said materials, the quicksilver reassumes nearly its original appearance, showing that a pharmaceutical mixture only, and not a chemical change, has been effected.

Upon exposure to the usual warmth of the atmosphere, *Hydrargyrum* very slowly evaporates; and although it does not take the oxygen out of the atmosphere, yet if placed in a suitable

apparatus, and moderately warmed, being at the same time exposed to the air, it very slowly unites with the oxygen, first becoming a black, and afterward changing into a red, powder.

Most acids have no effect upon it; but it dissolves very easily in cold nitric acid. Upon being mixed with sulphuric acid and warmed, it emits a vapor of sulphurous acid, leaving a salt—(Sulphuric acid, mercurial oxyde.)

Quicksilver in its natural state is innoxious, but if converted into an oxyde, into Chlor or Chloride, it becomes an acrid poison.

As a poison its effects are occasionally made manifest in cases of self-murder, or the murder of others; in domestic economy, and in technical uses.

Professor Neuman, of Utrecht, has proved that mercurial preparations, whether used externally or internally, are absorbed into the meat and milk of animals, by the use of which, whole families have been poisoned. Does not such evidence go far to prove the dangerous effect liable to be produced upon the milk of nurses, who are treated with mercury; may they not poison their own infants?

There is a very dangerous article of household economy in frequent use in many families. We refer to a certain "bed-bug poison," which consists of three ounces, of sublimate dissolved in a quarter of a gallon of alcohol. We know a hotel keeper who uses in one summer from ten to twelve such quantities. As a consequence, members of the family, and especially the chamber-maids employed in the household, experience more or less conjunctivitis and pulmonary irritation. Where this preparation is made use of about rooms and bedsteads, the alcohol soon evaporates, and the sublimate, in the form of an insidious poison-dust floats in the air and is inhaled, mostly by those who sweep and dust and make up the beds in rooms where the material has been used. Yet, notwithstanding the hotel-keeper has been warned of the danger, we see him continually passing with his large bottle (carefully marked "Poison") to be filled by the "I don't care" druggist.

Among its Technical uses, may be named those by Looking-Glass Manufacturers, Quicksilver Distillers and Photographers.

We next come to notice its Medical uses, or abuses. Could we lift the dark veil which enshrouds the history of mercury, a glimpse of the murderous effects which it has produced and is still producing, would make humanity shudder.

Mercury, and especially calomel, have long been in use as (we hate the term,) a "family medicine." It is used commonly and carelessly, by mothers, nurses, and ignorant charlatans. The ignorant practitioner sees no danger; the poison dose is administered, the result is bad, but nobody is blamed; an accidental cold has interfered with the desired operation of the medicine, or the patient has been imprudent, and eaten or drank of something injurious, etc., etc. We hold that no one has any right to run a steam-engine who is totally ignorant regarding its construction, and the means and appliances needful for its proper working; in a far greater degree objectionable is it for any one to administer any kind of medicine who is ignorant of its chemical properties, and its particular results. Yet with unscrupulous temerity, anybody, everybody, thinks he may run the engine of the human body, though loss of health be the forfeit, and the precious life be risked. But there is no law to prevent this wholesale poisoning, and the community being too ignorant to understand or appreciate the danger, there is no way whereby the evil is likely to be remedied. One lamentable result of it, however, is manifest in the wretched condition of the teeth of nearly all our youth. How seldom does a beautiful set of natural teeth greet our eyes! We have only to look at the enormous manufacture of artificial teeth, nursing bottles, etc., to be made aware that there is a sad deficiency of healthy development in both sexes, at the present day. Thus much we say, without making mention of those things unseen by the community at large, but which come daily to the notice of physicians, and lead us to exclaim, "Good Lord, deliver us!"

When shall the glorious light of reform arise? Shall the ignorant pretender continue to pursue his destructive work? Shall medical science be trampled under foot, and he who would diffuse its blessings be oppressed in his noble pursuit? More than half the nineteenth century has passed, and America cannot yet be said to possess any Medical Policy; shall the entire century pass, and still no hand be laid upon the demon of destruction? The prime benefit of medical laws is to separate the good from the bad, the educated from the ignorant; it is an accorded fact, that those who walk the path of wisdom are constantly becoming more and more elevated and enlightened, for the progress of Truth is higher—ever higher; while such as practice and

pursue error, do but sink deeper and deeper in the mire—their course is evermore downward!

When civilized Europe established Medical Laws as we behold them, regulated by government, as well for universities as for the practitioner; then was laid the corner-stone of the temple of medical science; then was the birthday of Chemistry, and the doom of Alchemy and isms was sealed. Then was the birthday of Truth and Fact, while the funeral knell was sounded over the grave of Delusion and Hypothesis.

The *Symptoms* of mercurial poisoning may be considered as *Acute* and *Chronic*.

The symptoms of acute intoxication are those of the severest gastro-enteritis, accompanying which, the mouth, tongue and throat, are all covered with a grey coat, and the glands are swollen; there is present a stinging metallic taste, great expectoration, burning sensation and spasmodic contraction of the throat; making it difficult for the patient to swallow or to speak; furthermore follow dyspnoea, singultus, insensibility, convulsions and sopor.

The symptoms of *chronic* intoxication are, salivation, stomatitis, trembling, paralytic symptoms, and general dyscrasia.

Analysis.—All mercurial preparations are reduced by copper. (See introductory remarks; Copper process.)

Of all mercurial preparations, Calomel is the most used. It is a heavy white powder; hence it is easy to collect it from the vomited matter, or contents of the stomach and bowels required to be analyzed; in an examination of the intestines a particular inspection should be made of the *processus vermicularis*, where this powder is especially apt to collect. By washing the suspected matter in cold distilled water, the calomel, if present, is soon discoverable, as, being heavy, it sinks to the bottom of the vessel as a white sediment. Calomel is not soluble in cold water, alcohol or ether, but becomes so, when mixed with either of these fluids made hot, or on being boiled in them. Exposure to the atmosphere or light, converts the calomel into a black powder. Calomel is decomposed by a solution of *Hydras Kalicus*, (caustic potash,) *Aqua Ammonia* or *Aqua Calcis*, which changes it into a black powder, or *Hydrargyrum oxydulatum nigrum*.

When calomel is put into a glass reduction tube, and sufficient heat applied, it will entirely escape in vapor.

When Carbonate of natron is added to, or mixed with calomel, and placed in a small reduction tube, upon the application of heat, quicksilver is obtained.

Sublimate, is a white small needle-shaped crystal mass, easily reduced to a powder, which is white and heavy. Sublimate, when exposed to the atmosphere does not change color. It is soluble at the rate of one part of sublimate in eighteen parts of *cold* water, or *two* parts of boiling water. It also dissolves freely in alcohol or ether, which solution shows an acid reaction. It dissolves also in muriatic acid.

Sublimate melts when strongly heated, and then changes into vapor. Sublimate is very easy to detect; no matter if it be mixed with organic substances or many materials, in a high temperature it decomposes, and quicksilver is the result.

When the presence of sublimate is suspected in any substance, mix with it *Aqua destillata* warmed and filtered, to this add a solution of *Kali Natron*, or *Aqua Calcis*, and it will produce, if it contain sublimate, a reddish-yellow precipitate. If there be added to the solution, *Ammonia liquida*, or solution of *Nitras argenti*, a white precipitate is the result; if *Iodium-Kali*, a yellowish-red precipitate is produced. *Aqua Hydrosulphurata* makes a black precipitate—black sulphuret of mercury.

Treatment.—It is in every case necessary to make the patient first drink freely of cold milk, eggs beaten, or flour mixed with cold water, decoction of quince-seed, barley, or linseed, being careful that all such drinks be used in a cold state, and very freely. After the use of any one of these drinks, and as soon as practicable, an emetic will be found very efficacious; although not easy to discharge the poison by vomiting, yet a portion of it will so mingle with the material just drank, as to be expelled by this means; moreover, the stomach will thus be cleared of bile, mucous and other substances, so as materially to modify the effects of the poison. While we are not often called to the treatment of acute intoxication by this poison, yet in *chronic* poisoning produced by calomel in the form of *Stomatitis* or *Salivatio Mercurialis*, we are often called to render aid, and the more so, since the ignorant or the careless, use it as a common medicine to clear the stomach and bowels, as they would an ordinary cathartic.

Furthermore, *Opiata*, etc., are prescribed as follows:

R. *Chlorati kalici*, drachmam unam.
Mucilagin. g. Arabici, unciam unam.
Pulvis opii, grana duas.
Aqua naphae, unciam unam.
Aqua destillatae, uncias quatuor.
Syrupi althae, unciam unam. *Misce detur.*
 S. *Omne hora cochlear.*

On every occasion prior to using this medicine, the patient should rinse out the mouth thoroughly with the following wash:

R. *Florum rosarum*, drachmas duas.
Infund. l. a. ad col. uncias septem; *adda,*
Chlorat. kalici, drachmas duas,
Mellis rosarum, uncias duas. *Misce.*

When *Clysmata* are required, the ingredients as above named can be used.

For diet, let soft food be given, bread and milk, barley, rice, etc., let all be given in a cold state for the first twenty-four hours.

To eliminate absorbed mercury, *Iodetum Kali-cum* is recommended in the following formula:

R. *Iodeti kalici*, scrupulam unam.
Aqua chamomillæ, uncias quatuor,
Syrupi mannae, unciam unam. *Misce detur.*
 S. One dessert-spoonful three times a-day.

To be continued.

EDITORIAL DEPARTMENT.

PERISCOPE.

Battle of Fair Oaks.

BY FRANK H. FAMILTON, M. D.

Medical Director of the 4th Corps, Army of the Potomac.

The night of the 30th of May was remarkable for one of the most violent and long continued thunder storms I have ever witnessed; commencing before sunset, it continued unabated until after midnight. During which time the rain fell in torrents, and the flashes of lightning, followed by near and heavy bursts of thunder, were almost incessant. In vain we strove to turn the drifting streams from our tents; and long before morning officers and men had resigned themselves, cold, wet, and helpless, to the storm. At length the day broke upon a camp inundated in water. The few hill-sides were washed clean—the marshes which abound in this region, were flooded—the rivulets greatly increased in size—the roads rendered nearly impassable, and, a circumstance from which we had most to apprehend, the Chickahominy, in our rear, had become swollen beyond its banks. From a sluggish stream trailing through cane-brakes and sedgy swamps, it had been suddenly converted into a broad and swift torrent, endangering our recently constructed bridges, and exposing us to the im-

minent hazard of being cut off from the whole centre and right wing of our army, no portion of which had yet crossed the river.

The sun shone clear and bright over the swamps and forests in which the corps of Keyes and Heintzelman were bivouacked—and the troops, accustomed to hardships, came cheerfully to bail out their rifle-pits and trenches; but those in responsible commands, who readily comprehended the nature of their new perils, looked thoughtful and anxious.

We were standing in front of our tents when a file of soldiers reported to the General a prisoner, just captured within our lines on the right. The prisoner was J. B. Washington, aide-de-camp to General Johnson. While General Keyes was conversing with him, two shells passed over us, proceeding apparently from the enemy's lines on the left. Young Washington looked around toward his own lines in a manner indicating restlessness, and perhaps in expectation of immediate succor. The guard was instructed to conduct him to General McClellan, and soon after General Keyes, having sent by an orderly a written communication to Headquarters, mounted his horse, and accompanied by his staff rode to the front. This was about 11 o'clock. A. M.

We first visited the right of the line near Fair Oaks station, and while the General was disposing the troops, I rode to the encampment of the 61st Pa. Vols., to inquire of Dr. Tyndale, its very intelligent surgeon, whether a house situated still further to the right and occupied by our pickets, could be used as a hospital.

While conversing with him, a pretty heavy musketry firing was heard on the left, not far distant, and a single cannon shot passed over us.

Spurring our horses along the "Nine Mile Road" in the direction of the firing, at the crossing called Seven Pines we came in sight of the enemy, now occupying the margin of a wood a few hundred yards in front of us. Our troops were replying vigorously and holding their position steadily. At this point I drew up my horse, while the General went forward. My mounted orderly had disappeared, and I never saw him again.

Riding to our encampment, about twenty rods to the right, to order forward the ambulances, I found ambulances and drivers with my servant, gone.

I had already determined to send my sick and wounded to Savage's Station, about one mile to the rear, and resuming my position at the Cross Roads, or Seven Pines, I awaited the return of the ambulances, for which a messenger was immediately dispatched.

The firing now extended across the whole front, and stragglers from broken regiments began to file past me. I am happy, however, to add my testimony to the testimony of others, that the number was small, and most of those who came from the front had the look peculiar to soldiers who have just been engaged in a severe contest. They seemed exhausted, walking slowly back, trailing their guns or without guns. Their

clothes were soiled and torn, and their faces blackened with powder, especially about the mouth. Many were wounded, some severely, others slightly. To these were added at first, not a few who were sick, and had occupied hospital tents and two or three small houses near the front. The only aid I could render them at this moment, was to direct them down the road to Savage's Station.

One hour and a half, or until about 2 P. M., I remained in the same spot, having meanwhile sent three messengers for the ambulances, but not one of the messengers had returned; the number of the wounded was momentarily increasing, and groups of soldiers bearing their severely wounded comrades upon litters were constantly passing. As yet the enemy had made no advance beyond the point of their first attack. Occasionally a bullet aimed too high whistled over my head, and one struck the ground and threw the mud against my horse with such force as to lead me to suppose for the moment that he was hit.

Provoked at the delay in forwarding the ambulances, I rode back to Savage's Station, near which they were found under the grateful shelter of a hill, and entirely concealed from the sight and shot of the enemy.

With as much speed as they had sought the shelter of the hills I pushed them back to the first line of rifle pits, beyond which our steady but now decimated troops were still holding their ground. One two-wheeled ambulance was found in the road, the horse lying dead, killed by a shell. Inside was stretched a soldier badly wounded in the thigh. He was transferred to one of our ambulances, and the driver directed to draw up on the side of the road and wait until his conveyance was full. As may be supposed, such orders are not always obeyed by ambulance drivers on the field of battle. In some instances, unless closely watched, the drivers start for the rear the moment one wounded man is taken on board. To this, however, it is but justice to say there are many exceptions; and instances of bravery and faithfulness on the part of this class of men and boys, have been frequently observed which would entitle them to honorable mention in military reports.

After having disposed of the ambulances and left instructions with the Provost Guard at several points of the road where to direct the wounded, I returned to Savage's Station.

Savage's Station is a point on the Richmond and York river railroad, about seven miles from Richmond, within a few yards of which Mr. Savage has a fine dwelling house, surrounded by a beautiful sloping green sward, shaded with large oaks, and inclosed by a palisade. There are in addition, adjoining the family residence, negro quarters, barns, and sheds, twelve or fourteen in number; all together being sufficient to accommodate 500 men. Within a short distance is an ample supply of water. These premises were at the moment occupied by General Heintzelman as his Headquarters, who with his staff was encamped in tents on the green immediately ad-

joining the house. Probably 500 wounded men were already collected on the grounds.

After consultation with Dr. Milhau, Medical Director of General Heintzelman's Corps, we began the difficult work of organizing a hospital. Surgeons were directed to report for duty—stragglers were impressed as nurses, cooks, and attendants—boxes containing culinary apparatus, bandages, medical stores, etc., found at the depot, were unceremoniously broken open—commissary stores were confiscated—two large iron kettles were found, and men assigned to duty in keeping one of them supplied with hot coffee, and the other with boiled rice.

Three principal depots were established for cases demanding operations, one in a barn, one in a hospital tent, the only one we had, and one under the shade of a tree in the rear of the house. To each of these depots from one to three surgeons were assigned with assistants. Other surgeons were detailed to the separate and detached buildings, and still others to the care of the wounded lying upon the ground.

It took me some time to get the entire machinery in order, but after a few hours, what with supplies of instruments, bandages, portable soup, etc., sent to us from the White House by Dr. Tripler, and lemons, with sundry other articles, sent to us by the Sanitary Commission, a fair degree of system was attained, and the wounded began to receive tolerable attention.

When it is considered, however, that so terrible a conflict had not been anticipated, and no hospital preparations had been made at any point nearer than the White House, it cannot be supposed that, to some extent, all the wounded did not experience inconvenience, and that others did not actually suffer from delay or neglect. During the first day and night probably one thousand men demanded succor; not more than one half of whom could be accommodated with shelter. The grounds were literally covered with these poor fellows, and when night came it brought, as is very common here after a sultry day, a drenching thunder-storm.

We did not sleep that night—I did not, and if any medical officer sought rest, it must have been because exhausted nature compelled a suspension of labor; for the occasional cries of acute suffering from every side, and the silent, patient, uncomplaining endurance of pale and delicate-looking boys, of men deprived of limbs, of soldiers of all ranks, privates and officers, upon whose faces death had fixed his mark—these were reasons why we could not think of rest. Very few had blankets; and, lying with their faces to the clouds, they watched for the day. With scarcely an exception these brave men met the storm of rain and wind during that night as they had met the bullets of the enemy during the preceding day, without flinching.

Capital surgical operations, necessarily suspended at night, were resumed in the morning; and not long after daybreak the heavy roll of musketry in front notified the surgeons that new work was preparing for them.

During the night one load of wounded men had been sent down to the White House, but although the current of wounded coming in from the field had slackened, yet it never entirely ceased, and before morning our number was greater than on the preceding night.

About seven A. M. the avenues in every direction leading to the Station, were filled with wounded men coming in slowly on foot, on stretchers, or in ambulances.

Fortunately we had received before night on the day previous, valuable accessions to our Medical Corps in a number of volunteer and contract surgeons sent up to us from the White House. Our own surgeons had been laboring all the day and night upon the field, and were today more needed with their regiments than yesterday.

The gentlemen sent to me were distributed as follows. *Volunteers*: Drs. W. H. Page and A. B. Hall to the hospital tent; H. O. Hitchcock to negro hut No. 1; John Swinburne and John V. Lansing to the barn No. 1; Dr. Burr to the wounded in the yard. *Contract Surgeons*: Dr. F. C. Green to remain at the cars and embark the wounded; Drs. A. Millet and L. D. Seymour to barn No. 2; Drs. J. A. Jacobs and P. Middleton to barns Nos. 3 and 4; Dr. Jas. M. Good to barn No. 5; Dr. Joseph Underwood to hut No. 2; Dr. Alexander Monroe to the dwelling-house of Mr. Savage; Dr. Charles Lodge to Antioch Church, about one mile below; Dr. T. I. Kerby to a house a little further down; Dr. J. L. Sutton to a house near Bottom's bridge; Dr. Elisha G. Esten to another house, containing 100 men.

The wounded had without instructions, gathered in several buildings along the line of the road; and to these places, as soon as they were reported to us, we sent the gentlemen last named.

It became necessary also to detail one or two medical men to stand at the entrances to the grounds, with attendants, in order to unload the ambulances, get them out of the way, and to distribute the wounded.

All day the wounded came in, and all day the trains bore them off. A second night found us with the numbers not diminished, and to the Medical Officers and faithful attendants the work no nearer its completion. Again, about midnight a severe thunder storm passed over us, this time accompanied by a driving wind which tore away, in some cases, the poor shelter we had constructed for the men; but—it is strange—there was no complaining; while they had been lying on the open field, two nights and one day, many had been carried off by the cars, many had died, but others still waited patiently for their turn. When the order came for the litter bearers to carry them to the cars, they picked up their canteens of water, with the fragments of hard bread which were lying beside them, and turning toward us their bloodless faces, thanked us and said "Good-bye, Doctor." I do not remember their names, but I wish I knew the fate of that young lieutenant whose arm was carried away by a cannon shot, and who sat, or leaned, against

the foot of one of the trees all this time, and upon whose face I never saw a sign of impatience; and of the boyish-looking private who, wounded in the thigh and arm at the same time, lay upon the grass under burning sun by day, and under dews and rains by night, washing his own wounds with his left hand, and carefully dividing his single piece of oil cloth with his rough-looking comrade beside him.

June 2d, the day after the second battle, the number of wounded brought in was scarcely less than on the previous days. There were those who had been left on the field, and had gradually made their way in, or who had been found in the marshes and woods occupied on Sunday by the enemy. Details of men had been sent out under charge of surgeons, with litters and ambulances, to search in every direction to the extreme outposts of our picket lines. In this duty I took part myself. The dead were lying thick over the whole extent of the disputed grounds, with here and there a wounded man unable to extricate himself from the marshes, abattis or woods where he had fallen. At one place, in a tent, we found eight of the Confederates, with their wounds undressed, and some of them in a shocking condition.

Notwithstanding the heavy details that were made from day to day for this purpose, it was several days before all the dead were buried. The enemy, although occupying a large portion of the ground after the battle of the first day, had left multitudes of their own dead as well as of ours, unburied. Within a radius of twenty feet of where the gallant Major Van Voltenburg of Bailly's battery lay dead, were fifteen dead Confederates.

The dead horses around this battery numbering fifty or more, were finally disposed of by consuming them under piles of brushwood.

It is painful to state that so late as the third or fourth day wounded men were rescued from the marshes, who had lain all this time without succor.

We continued to search from day to day during several weeks. On the 16th of June, Dr. Haven, Brigade Surgeon on General Peck's staff, reported to me that he had that day discovered on a piece of ground, recently occupied by our advancing pickets, several unburied dead bodies. On the morning of the 17th, Dr. Haven and myself, with a detail of five men went to the post, and found the bodies of eleven men, all Confederates, lying in a marsh on the extreme left of our lines, near the point where General Peck first met the enemy so vigorously on the 31st of May. We buried them all, but the remains of only one man were identified: this was Lieutenant A. P. Stovall, of Congers, Ga. His initials were carefully carved by us upon a large pine tree at the head of his grave, and the bearings of the tree carefully noted, in order that his friends might hereafter recover his remains, if they desired to do so.

It is impossible to say precisely how many wounded men passed through our hands at Sav-

age's Station during the first three days after the battle, but it is certain that there were not less than 3,000. The entire absence of anything like a permanent provision for the wounded at this point rendered it imperative that they should be sent as speedily as possible to the rear. At first, and until several car loads had been sent off, we registered the names, company, and regiment of each man, with the character of his wound, and the surgical operation made, but soon the pressure became so greatly disproportioned to the abilities of the Surgical Corps that the enumeration had to be suspended.

Many amputations were made, and nearly all of them, I believe, while the patients were under the influence of either chloroform or ether; chloroform being employed in a majority of cases. Surgeons on the field made a few "immediate" amputations, some of which I saw on the following day doing well, but most of the amputations were "primary" as distinguished from "immediate," that is at periods ranging from six to forty-eight hours after the receipt of the injury, when, to a degree more or less, the system had rallied from the original shock. It is true, however, that only in a small proportion of the cases, even after the lapse of twenty-four or even forty-eight hours, had the system fully recovered from the shock. The long exposure of many of the men upon the field, the chilling rains at night, and the want of stimulants or nourishment, may explain the general absence of reaction. Some sank soon after the operations were made, but most of the amputations looked encouraging when the subjects of them left the station. As to the final results, we have at present little or no positive information.

It is no part of my intention in this communication to record surgical cases, but only, by a careful circumstantial account of the events which followed the battle of Fair Oaks, and which came under my immediate observation, to convey to the young medical officer some idea of the duties which are likely to devolve upon him under similar circumstances. These events, in precisely the same order, with only slight variations in the details, have been repeated many times during this war under my own eyes. Other surgeons have had a similar experience in a multitude of instances. The number of surgeons in the army is small; there is no thoroughly organized ambulance corps; not more than one-fifth of the number of ambulances allowed by regulation is furnished, and not one half the proper number of litters; very few regiments have a transport cart for their hospital stores. Quartermasters are generally occupied in other duties than attending to the wants of the sick or wounded. Commissaries have to provide for the wants of their own regiments or brigades, and cannot supply rations to those, whether wounded or not, who having fallen to the rear, or are compelled to lie down and be fed, or perish within the limits of another command.

The surgeon on the field of battle and on the march, must improvise means to supply all these

wants, and to remedy all these defects. He must render himself in some sense, ubiquitous. He must not be only the surgical operator and medical adviser, but he must become Quartermaster, Commissary, Nurse, Cook, Litter-bearer, and finally, Undertaker. The surgeon must do all these things, not because such duties are required of him by the regulations, or are imposed upon him by the commanding officers, but simply because if he did not do them they must, in very many cases, be left undone.

Head-quarters of General Keyes's Corps, July 27, 1862.

Am. Med. Times.

Effect of a Large Dose of Chloroform.—A remarkable case is related by a correspondent of the *London Medical Times*, in which a person aged fifty swallowed at one dose two ounces of chloroform. The patient fell into a profound coma; the pupils were widely dilated and insensible; the pulse slow and feeble; surface of the body colder than natural; movements of the thorax scarcely perceptible, and sensation generally abolished. Several hours elapsed before any remedies were employed. A stomach pump was used, and a quantity of chloroform, muds, and watery fluid was removed, and the stomach thoroughly cleansed with tepid water. In less than an hour afterwards there was a return of consciousness. For three or four days there were signs of irritation of the throat and stomach, and at the end of a week the patient was quite well again.—*Am. Med. Times.*

BOOKS AND PAMPHLETS RECEIVED.

The American Journal of Ophthalmology.

In the rapid progress, which is now making, in the pathology, and treatment, of diseases of the eye; there has been wanting, some means, by which the American Physician and Surgeon could receive and be benefited thereby. To bring those facts fully before him, required a special Journal devoted exclusively to this subject in the United States. He wanted the views of such men as Von Graefe, Sichel, Arlt, Donders and others, which are exclusively published in Germany and France, fully translated, not curtailed and garbled with the many and valuable papers scattered in other Journals not exclusively devoted to Ophthalmology, but collected and brought to his notice, so that he may refer to them in time of need. It was therefore with much pleasure

we received the first two numbers of the "American Journal of Ophthalmology." Both these numbers are filled from those very fountains which to many are sealed up; but now by the labours of the learned Dr. Homberger, we enjoy and are also benefited pecuniarily thereby. We therefore trust that as Germany can support two or three, France two and England one journal devoted to "Ophthalmology," this great country filled with intelligent and well-educated physicians, will not leave the "American" Journal to languish, not even now in these troublous war times, for the subscription is only one-half that of the English Journal devoted to the same subject, while the number of pages is the same, and the matter fully equal in richness.

The contents of No. 2, "General Department" are, Diphtheritic Conjunctivitis by Von Graefe. Anomalies of Mobility of the Human Eye and paralytic Affections of the Oculo Motorius by Julius Homberger.

The Special Department is filled with twelve practical articles, such as "Treatment of Strictures of Lachrymal Duct with Fistula of the Lachrymal Gland;" on the uses of the artificial Leech in Treatment of Diseases of the Eye, with a most valuable report of one hundred and eighty-nine operations, for artificial pupil performed at the clinic of Dr. Desmarres, of Paris, &c., &c. Then we have his "Bibliographical Reports" not simply a notice of new books, but carefully written digests of new works and monographs from France, Germany and Prussia. We have in conclusion his Editorial Department with "Notes, Queries and Replies, on subjects of vital interest to the surgeon who devotes much attention to the Eye."

L. T.

Medical Communications, with the Proceedings of the 70th Annual Convention of the CONNECTICUT MEDICAL SOCIETY, held at Bridgeport, May 28th and 29th, 1862. Pp. 106. This Society bears the palm in the neat and systematic manner in which its transactions are issued. We expect to notice these transactions in detail.

Communications of the RHODE ISLAND MEDICAL SOCIETY for the year 1862. Pp. 69. Issued in much the same style as the Proceedings of the Connecticut Medical Society noticed above. We would call the attention of other societies to this style of issuing their transactions. At a future time we shall notice these communications in full.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, SEPTEMBER 13, 1862.

THE WORLD IS DOCTORED TOO MUCH.

"The world is governed too much," was once the motto of a leading political journal. The idea intended to be conveyed was not, we suppose, that the world should not be governed at all, or that the human race was constituted of materials so essentially and naturally congruous, and peaceably disposed, as not to require the enactment and enforcement of proper laws for their good government. But the idea, no doubt was, that the more simple the form of government the better; the less in number the laws enacted, and these extending not so much to the minutiae, as to the generalities of social or state life, the more certainly would they be obeyed; and that the true interests of the State and of the people which compose it, would be best promoted by efforts to elevate man in the scale of intellectual being, and thus teach him to govern himself.

So in the motto we have placed at the head of this article, we must not be understood as insinuating that the "flesh" needs no remedies for the "ills" it is "heir to," but that vastly too many human stomachs are converted into apothecary shops for the display of the various medicaments which science and art, observation and experience, quackery and cupidity, have discovered; and that the best method of promoting the public health is to inculcate the knowledge of nature's laws, and thus teach man to preserve his own health.

The world is doctored too much. The practice of dosing for every ailment that manifests itself, or that we fear may attack the corporal system, is well nigh universal. There is scarcely a dwelling in the land, but what, upon emergency, could muster a host of empty bottles and pill boxes, as evidences of the fact. And there are but few families into whose midst this practice has not made some inroads. If we go into the most obscure village in the land, that boasts only of its church, its post-office, store, and a few dwellings, we shall find no inconsiderable share of space in the latter, devoted to the display of mixtures and compounds, all neatly labeled and put up in quantities to suit, with prices to match, and "warranted to cure." Not only the igno-

rant, but the better informed country people, stand agape with wonder and amazement at the gaudy display of types and ink with which the walls of their village store are decorated. And the wary knight of the yard stick, keen upon the scent of the penny he may make, distributes the worthless but not harmless nostrums to all whose credulity or imaginary ailments demand them.

So also the itinerant medicine vender pursues his vocation from house to house, depositing as the cheese-fly does, its slimy offspring, the nest egg which shall form the nucleus of future demands.

So again, the apothecary and pharmaceutical establishments of our cities and larger villages, have a department especially devoted to the sale of "proprietary medicines" of the "better class." Eschewing quackery, and advocating always the sale of pure unadulterated remedies, they yet cannot resist the temptation to minister to the strong appetite of the people for "cure-alls" and "specifics." "The people will have them," say they, "and we need the profits." Such is the fact. The people will have them. The demand creates the supply, and reckless speculators enough will be found to furnish whatever the demand requires, or the gullibility of the people can be induced to swallow. Medicines, so called, are so common and so cheap; are paraded so persistently and so glaringly before the public eye in all the daily and weekly, political and religious journals of the day; are labeled so invitingly, and recommended so strongly, and with such disinterested motives, *pro bono publico*, only, that the temptation to swallow them is too strong to be successfully resisted. The invalid takes the nostrum in the hope that somewhere concealed among the drugs of his "panacea," "pain-killer," "dyspepsia bitters," or "sarsaparilla," the lost gem, health, may be found; the healthy and robust, that they may encrust themselves with an impenetrable shield through which disease cannot penetrate; the old, that the fires of youth may be re-kindled in their decaying systems; the young, that the "sere and yellow leaf" of age may be warded off; from the infant

"Mewling and puking in its nurse's arm."

that sucks from the teaspoon the "drops" that are to quiet its cries, and perhaps make it a drivelling idiot for life, to the old man just tottering upon the brink of the grave, no age or sex is exempt from the universal law of medicine.

taking. In some form a continuous stream is passing down the gullets of the people

"From morn till night,
From night till hoary morn."

There is no cessation, save perhaps, to breathe the air carrying upon its bosom, it may be, the exhalation of some drug, or to catch a moment's sleep, assisted by the potent influence of some soporific.

We do not here speak of the administration of appropriate remedies for disease actually present, by men of science and skill. If administered with the honesty and integrity which ought to characterize the legitimate profession of medicine everywhere, no deleterious results will follow. The amount of medicine used, would be reduced in quantity from puncheons and tons, to minims and grains, and the health, positive and absolute, of the people, would improve in like proportion.

We speak only of the thousand and one mixtures and compounds that are thrust under the nostrils of community at every corner of the street; which are manufactured by men of little or no repute, and so abundantly certified to by men of high repute—the judge, the statesman, and the clergy. In just the proportion these compounds are swallowed by the people, in just that proportion the world is doctored too much. And in exact proportion to the quantity devoured, are the powers of nature,—in herself a physician of no mean repute, and requiring only an occasional jog, or a gentle hint, to keep her in the great highway of health and vigor—compelled to hang her banner of inward distress upon the outer wall, or bury her agony in the grave. Nature abhors incessant medication, and she exhibits her abhorrence in her struggles to rid herself of the incubus. She tolerates and appropriates only those remedies, few in number and peculiar in their action, which harmonize with, not antagonize her operations. Viewed from this stand-point, therefore, we unhesitatingly affirm, the world is doctored too much. Medicines are too frequently and too persistently used, not as administered by legitimate prescription, but as "specifics" and "universal panaceas," and the results are clearly visible, in disordered digestive organs, derangement of the nervous system, wasting energies of manhood, and the just penalty of a premature grave, as the closing scene of the sad reality. The remedy for this mania for medicine, or medicinal compounds, we have indicated above. Were the laws which govern the physical system, and by the carefu

observance or non-observance of which, the healthy action of each organ of the body is promoted or destroyed, and harmony or discord is made to prevail throughout the whole, were these laws well understood and obeyed, the quack would display his tempting wares in vain, and the worthless nostrum would be left to rot upon the shelves of the apothecary.

NOTES AND COMMENTS.

A serious charge against Surgeons.—A cor- of the *Philadelphia Inquirer*, writing from Washington, September 10th, makes some serious charges against surgeons of regiments. He says that they are frequently neglectful of their charges, and allow much unnecessary suffering. He gives as a case directly in point, that of "a Pennsylvania regiment now doing active service, and which did nobly on the 3d of August. I met its Chief Surgeon in the streets of Alexandria, a few days since, and, although his regiment has been in the field for months past, his blue broadcloth was still unfaded; his shoulder straps bright and untailed, and his countenance un-tanned and mellow as the pleasant walks of Alexandria could provoke. His regiment was then in the face of the enemy, and a subordinate of his working, as I have since learned, bravely and skillfully, at his post."

Now there is no question but a Surgeon's place is with his regiment, particularly when it is "in the face of an enemy," and one who is found neglecting his duty as charged above, should be cashiered, and dismissed the service. His superior officer should know whether a Surgeon is at the post of duty, and if not, he should know the reason why, and report him at headquarters if he is neglectful. We are sorry to have to record the fact that two or three Surgeons have been summarily dismissed from the service for neglect of duty.

We hope, however, that there is no truth in the charges of the correspondent of the *Inquirer*. If there is, they should have been made openly, and fastened upon the guilty parties. We have confidence that our Surgeons will not disgrace themselves and their profession in the manner indicated above.

Public Acknowledgement of Volunteer Services.—Dr. S. O. Vanderpoel, Surgeon General of New York, in a letter to Dr. Swinburne, dated August 5th, gives official expression at the request of His Excellency Gov. Morgan, of his high appreciation of the services rendered by Dr.

Swinburne and the "noble corps of volunteer Surgeons, who so promptly and faithfully gave their time, their energies, their professional abilities, and in some instances, their lives, to ameliorate the sufferings of the wounded" on the Peninsula. The letter is particularly flattering to Dr. Swinburne, who acted as Medical Superintendent of the volunteer surgical forces from New York, and acting assistant Surgeon U. S. A., and congratulates him on his safe return to his family, after a temporary sojourn within the enemy's lines.

The Sick and Wounded of the Army of the East.—The total number of sick and wounded soldiers in the various Hospitals in and around Washington, is 14,500. The Hospitals in and around Alexandria, contain about 3,000, making a total of 17,500.

If we estimate the number in Baltimore, Annapolis, at Point Lookout, and at Harper's Ferry, at 7,500—and those in Hospitals in Pennsylvania, New York and New Jersey at 16,000 it will give a grand total of 41,000. It is hardly likely that the sick and wounded on furlough will amount to 9000, so that we think it is fair to assume that the total number of sick and wounded of the Federal army of the East is less than 50,000. As cool weather comes on this number will be rapidly diminished.

"Honor to whom honor,"—A brief note in the *REPORTER*, of July 26, says "that the Confederate authorities have ordered the unconditional discharge of all Federal surgeons and chaplains, taken prisoners in the discharge of their legitimate duties. This is in accordance with the example set them by this government." We are pleased to record the official recognition by both belligerents in this war, of a principle which we have strongly advocated as appropriate and humane. But candor and truth compel us to acknowledge, that the palm of honor in setting "the example" belongs not to the National but to the Rebel authorities. If the reader will turn to Page 324 (June 28) of the present volume of the *REPORTER*, he will find the facts in the case, correctly stated from official documents.

CORRESPONDENCE.

The wounded after the battles of the last week in August.—An agent of the Sanitary Commission in a letter published in the *New York Daily Times*, writes as follows. It will be seen that his

arrival, under the circumstances was timely and providential.

"We started from Washington with our wagons laden with sanitary stores on Saturday evening, and reached the line of our army at the foot of Centreville Hills, at 8 o'clock next morning, (Sunday, August 31st.) It was a ride of only thirty miles, but we were delayed by the trains and crowds that were moving in both directions. At the summit of the hill, just this side of Centreville, I came upon a train of fifty or sixty ambulances stationed in the rear of one of the old rebel redoubts, the enemy's shells being expected every moment. On communicating with the surgeons on the ground, and with the wounded, I learned that there was a lamentable lack of medical and sanitary stores, the supplies having been cut off by the raids of the enemy. Forty-two wagons laden with medical stores had been captured at Manasses. Many of our wounded soldiers had been without food for two days, and were soon to start for Alexandria and Washington over a rough and stony road, at the mercy of the merciless and insubordinate ambulance drivers. My wagon-loads of crackers and of pure and honest stimulants were soon cheering the eyes and comforting the exhausted nerves of many. Some were arranged on the narrow couch of the ambulance, others lying on the wet ground with no covering above them or rubber cloths under them, waiting their turn, or looking anxiously to the nearest ambulance as to a haven of rest.

As the field of battle of Saturday was in the hands of the enemy, it was not possible without much delay, to carry out the original plan of reaching the wounded still there, and it was the opinion that I would not be permitted to enter the lines of the enemy. The need of stores at Centreville and in the very streets, (where surgical operations were going on and the wounded lying about,) was so apparent that there was no question as to present duty. Most of the houses of that dilapidated village were already occupied as hospitals, and a room was not to be had. I therefore appropriated an old hay-rack and a section of the rough sidewalk for my depot, and my boxes were soon arranged and opened. I had conferred with the Medical Director and with others of the Medical Corps, as they were hurrying through the town to and from their camps, so that a wise disposal of supplies soon became a work of time only. Pressing inquiries came from all sides: "Have you stimulants, have you bandages, lint, dressings, splint, sponges, food, anything for the wounded?" And when my affirmative included beef, tea, chocolate and condensed milk, you will appreciate the effect.—The "interest of the occasion" was heightened by the fact that the street was crowded with wagon trains, regiments, stragglers, wounded, etc., and my depot generally regarded as a sutler's stand—the consequence being that I was besieged by the rank and file in very unmilitary confusion to sell much of what I had, and more of what I had not.

NEWS AND MISCELLANY.

New Military Hospitals.—Our immense and rapidly growing army calls for adequate hospital accommodations. In addition to the numerous hospitals already established in and near this city, we learn that a new one is about to be erected at Chestnut Hill, of capacity sufficient to accommodate nearly 3000 patients.

The building will be of wood, rough-cast on the outside, and lined on the inside with boards. The roof will be covered with felting. The extent of ground actually covered by the hospital will be 1037 by 912 feet. There will be 47 wards for the reception of patients, each being 175 feet long by 20 feet wide, all connected with a corridor 16 feet wide, in which is placed a small tramway for cars, to facilitate the distribution of food and supplies. Each ward will contain 60 beds, thus conveniently accommodating 2820 patients.

In the centre there is a building two stories high, in dimensions two hundred feet long and thirty feet wide. This is devoted to the Medical Department, and is connected with the main corridor by means of a covered way ten feet wide. The kitchen is placed on the side next the Chestnut Hill Railroad, is one hundred feet long by thirty feet wide, and amply supplied with steam cooking apparatus, ranges, stoves, &c. The washing and ironing rooms are each sixty by thirty feet, with a drying room heated by stoves. The Steward's store room, ice house, meat house, milk house, and the Steward's apartments, are in one building, twenty by one hundred and seventy-five feet, situated convenient to the railroad.

The knapsack room, barracks, prison, &c., are in another building of the same dimensions. Over the wash and ironing rooms are placed sleeping apartments for the domestics attached to the institution, all of which are most thoroughly ventilated. Ample provision has been made for drainage, by means of a substantial brick sewer, in extent sixteen by twenty-four inches. All the wards are to surround a hollow square and radiate from the centre. There will be a Wardmaster's room, dining room, water closet, bath room, wash room and scullery, attached to each ward.

The water for the use of the building will be supplied by the Chestnut Hill Water Works, which are situated about three hundred yards from the site of the hospital; the main pipes running the entire length and breadth of the ground, with supply pipes branching therefrom. In the engine room will be a steam fire engine to force water to sixteen fire plugs equally distributed about the building.

There has also been a plan submitted for an hospital, constructed on similar principles, capable of accommodating 1000 patients, located at the Hunting Park Course, a suitable and delightful spot.

Yellow Fever.—We see it stated that the crews of the French vessels of war in the Gulf of Mexico have suffered terribly from yellow fever, not less than *seventy-five per cent.* of their forces being prostrated by the disease!

Domestic Wines.—The medical purveyor of New York has, upon special request, furnished many of our army surgeons with the native wine and brandy, and they have reported on them so favorably that it would seem only necessary to make known to all the fact that we have of our own production, a cheap and perfect substitute for two such valuable and costly articles.

Medical Department of Lind University at Chicago.—We learn that there is a prospect of a good class in this school the coming winter.

U. S. Marine Hospital, Burlington, Vermont.—Dr. S. W. THAYER, surgeon in charge of the U. S. Marine Hospital at Burlington, Vermont, gives the following summary of cases treated in the hospital during the months of May, June, and July, while the institution was under the direction of the State authorities:

Sick and wounded received from seat of war, 187
Sick recruits, admitted to Hospital Camp, 87

Total,	-	-	-	-	-	274
Returned to duty,	-	-	-	-	-	183
Discharged the service,	-	-	-	-	-	50
Deserted,	-	-	-	-	-	6
Died,	-	-	-	-	-	6
Furloughed,	-	-	-	-	-	3
Remaining in hospital,	-	-	-	-	-	26

274-274

Of the above, 187 were sent from Hospitals South to the United States Marine Hospital, by the Agents of the State.

Since the transfer of the Hospital to the Surgeon-General of the United States Army, a larger number of soldiers have been under treatment in the hospital.

Military Hospital on David's Island, New York.—This extensive hospital is located on David's Island in Long Island Sound, opposite Flushing, Long Island, about twenty-five miles from New York. There are now about 2,500 patients in the hospital, and preparations are nearly completed to receive 1,100 more.

The Government has spent about \$200,000 in the erection of buildings, draining, digging wells, &c.; and a careful inspection of the numerous structures, and the large amount of work performed, would satisfy the most testy grumbler that the money had been economically expended. The buildings are arranged in rows, with ample streets between, and are all painted white, with green blinds, presenting a neat, comfortable, and tidy appearance. There are 20 hospitals, or pavilions, as they are called, and 10 mess-rooms—the latter standing at intervals between the

pavilions. The pavilions are 250 feet long, 25 feet wide, and 20 feet high, with ample ventilation at the top. The mess rooms are 85 feet long, and of the same width and height as the pavilions. At one end of each mess room is a kitchen capable of cooking for 160 persons, and in addition to these is a general kitchen, capable of cooking for 2,000 persons, and a bakery which can turn out 3,000 loaves of bread per day. Besides these, are three other kitchens for the volunteer associations, of which more anon. A large centre building is also being erected, and nearly completed, for the accommodation of the officers in charge of the Island, surgeons, apothecaries, clerks, &c. In addition to these buildings, which are all well built substantial structures, 250 hospital tents with board floors, each accommodating 10 patients.

The military commandant of the Island is Capt. R. C. MORGAN, of the regular army, and the hospitals are under the charge of Dr. J. SIMONS, also of the regular army, who is Surgeon-in-Chief, and Dr. E. LEE JONES, of the volunteer service. Each hospital or pavilion also has its separate doctor, and the entire medical corps is composed of men skilled in their profession, and constant and faithful in their attendance.

There are three volunteer kitchens connected with the hospital, from which delicacies are furnished to the patients, such as no Government, however generous it may be, has ever yet put down in the soldiers' bill of fare. One of these kitchens is occupied by an association of ladies from Yonkers, another by the ladies of New-Rochelle and Glen Cove, and the third by the ladies of Pelham, Brooklyn and New York.

The articles from the volunteer kitchens are dispensed only on the written orders of the surgeons and doctors, so that there can be no complaint of interference with the physician's regimen, or that the patient was killed by too much "stuffing."

To show what drafts the doctors find it convenient to make upon the ladies' larder, we give below a list of dishes dispensed from the Yonkers Kitchen on Sunday last:

Toast, 400 plates; jelly, 18 plates; baked apples, 100; roast beef, 35 plates; roast chicken, 40 plates; beef tea, 30 bowls; chicken broth, 18 bowls; tea, 202 cups; bread pudding, 70 plates; rice pudding, 28 plates; custard, 10 plates; corn bread and mush, 14 plates; gruel, 14 bowls; scalded milk, 8 bowls; crackers, 12 plates; biscuit, 120; hash, 36 plates; squash, 10 plates; corn-starch, 20 plates; peaches, 20; oranges, 25; lemons, 12; pears, 10; stewed do., 30; clam broth, 8 bowls; bread and milk, 8 bowls; potatoes, 10; milk punch, 200 tumblers; pickles, 12.

Insane in Philadelphia and New York Alms-houses.—The number of Insane patients in the insane department of the Philadelphia Alms-house on the 6th inst. was 548. In the New York City Lunatic Asylum it was 773.

MARRIED.

BECK—ROGERS.—On Wednesday, Sept. 3, at New Brunswick, N. J., by the Rev. S. M. Woodbridge, D. D., the Rev. Samuel J. Rogers, of Battle Creek, Mich., and Harriet L., youngest daughter of the late Prof. Lewis C. Beck, M. D., of Rutgers College, New Brunswick, N. J.

HUMPHREY—DENNING.—In Lowell, Mass., 28th ult., by Rev. J. E. Rankin, Otis M. Humphrey, M. D., Assistant Surgeon Sixth Massachusetts Regiment, and Miss Sarah F., daughter of the late R. Denning, of Lowell.

DIED.

BARRINGTON.—In this city, on Thursday, 4th inst., Samuel Barrington, Surgeon U. S. N., in the 61st year of his age.

DETWILER.—On the 2d inst., Stanley Hobson, son of Dr. D. D. and Sarah Detwiler, Trappe, Pa., aged 5 months, and 13 days.

EATON.—Drowned, at Coney Island, N. Y., on the 9th inst., Dr. R. A. Eaton of Brooklyn, in the 52d year of his age.

GLEASON.—On the 8th inst., Margaretta B. Gleason, wife of C. W. Gleason, M. D., and daughter of the late Dr. Wm. Baldwin, of the U. S. N.

HYDE.—In Brooklyn, on Thursday, Sept. 11th, Lucius Hyde, M. D., in the 62d year of his age.

MACK.—At Carpenter's Landing, New Jersey, Aug. 16th, Mrs. Mack, wife of Dr. J. M. Mack, of Kankakee, Illinois.

SMITH.—On the evening of the 10th inst., Eliza Stewart, relict of James Smith, M. D., formerly of Chestnut Hill, in the 60th year of her age.

Vital Statistics.

On PHILADELPHIA, for the week ending Sept. 6, 1862.

Deaths—Males, 165; Females, 134: boys, 89; girls, 73. Total, 302. Adults, 140; children, 162. Under two years of age, 114. Natives, 223; Foreign, 63. People of color, 10.

Among the causes of death, we notice—Apoplexy, 5; convulsions, 11; croup, 6; cholera infantum, 20; cholera morbus, 1; consumption, 32; diphtheria, 4; diarrhoea and dysentery, 27; dropsy of head, 4; debility, 20; scarlet fever, 4; typhus and typhoid fever, 15; inflammation of brain, 8; of bowels, 7; of lungs, 6; bronchitis, 2; congestion of brain, 3; of lungs, 3; erysipelas, 1; hooping-cough, 6; marasmus, 15; small-pox, 14; For week ending September 7, 1861. 248

..... " August 30, 1862. 377

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 1519.9.

On NEW YORK, for the week ending Sept. 1, 1862.

Deaths—Males, 269; females, 267; boys, 177; girls, 185. Total, 536. Adults, 174; children, 362. Under two years of age, 301. Natives, 365; Foreign, 141; Colored, 5.

Among the causes of death, we notice—Apoplexy, 2; infantile convulsions, 24; croup, 10; diphtheria, 15; scarlet fever, 3; typhus and typhoid fevers, 12; cholera infantum, 97; cholera morbus, 6; consumption, 61; small-pox, 6; dropsy of head, 27; infantile marasmus, 55; diarrhoea and dysentery, 40; inflammation of brain, 15; of bowels, 13; of lungs, 12; bronchitis, 5; congestion of brain, 11; of lungs, 4; erysipelas, 0; hooping-cough, 6; measles, 3; 307 deaths occurred from acute disease, and 33 from violent causes.

For week ending Sept. 1, 1861. 443

..... " Aug. 25, 1862. 520

Population of New York, by the census of 1860, 814,277. Mortality, 1 in 1519.1.

On BOSTON, for the week ending Aug. 30, 1862.

Deaths—Males, 37; females, 38. Total, 95. Natives, 78; Foreign, 17.

Among the cases of death, we notice—Phthisis, 6; cholera infantum, 21; croup, 1; scarlet fever, 6; pneumonia, 7; variolæ, 0; dysentery, 5; typhus fever, 2; diphtheria, 2; hooping-cough, 0; convulsions, 5.

Population of Boston, 1860, 177,902. Average corrected to increased population, 114.55. Mortality, 1 in 1872.6.

On PROVIDENCE, R. I., for the month of Aug., 1862.

Deaths—Males, 54; females, 55. Total, 109. Under two years of age, 33; under fifteen, 62. Natives, 86; foreign, 23; American parentage, 49; foreign, 60.

Among the causes of death, we notice—Apoplexy, 0; cholera infantum, 29; consumption, 16; diarrhoea and dysentery, 17; disease of heart, 3; marasmus, 2; pneumonia, 1; diphtheria, 0; diseases of the brain, 3.

During the first 8 months of this year, the number of deaths has been 148 less than last year; and 113 less than the average for six years, and less than in the same period of any year since 1845.

The population of Providence in 1860, was 50,866, which gives 1 death in 464 for the month.

